***Addendum 1***

Applying knowledge of the heating ventilation, air conditioning and refrigeration principles, the incumbent performs the following:

1. On a variety of commercial and industrial systems checks elements such as those which control low side and high side pressure; the temperature of the cooling units; the temperature of the liquid and suction lines; and the running time of the various mechanisms. Checks for the probability of leaks by visual and audible examination of equipment components. Locates trouble, dismantles, makes repairs, and reassembles major components and equipment.
20 %

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2. Installs, maintains, and repairs electrical wiring systems, related switches, distribution panels and outlet boxes.
10 %

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3. Following maintenance schedules and inspections or work orders, performs maintenance services, diagnoses system or equipment malfunction, and repairs as necessary.
35 %

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4. Inspects, maintains, cleans, repairs, tests and adjusts a variety of equipment, circuitry, and fixtures such as chillers, walk-in coolers, walk-in freezers, air handling units, and supply/exhaust fans.
25 %

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5. Tests circuits and equipment by use of voltmeter, ammeter, wattmeter, ohmmeter, and manifold gages.

6. Use of recovery and recycling equipment for refrigerant gases; Tools and related techniques for the environment protection.
10 %

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7. Performs other duties assigned by his supervisor.

15. Qualifications Required For Effective Performance

a. Education

Completion of Secondary school and technical school on air condition and refrigeration is required.

b. Prior Work Experience

Two years of experience skilled worker, plus minimum of one year of journeyman experience in the air conditioning and refrigeration industry.

c. Post Entry Training

None.

d. Language Proficiency: List both English and host country language(s) proficiency requirements by level *(II, III)* and specialization *(sp/read)*.

Minimum Level II English ability, Spanish Level III.

e. Job Knowledge

Basic knowledge of English language. Knowledge of the composition, operation, and installation of a variety of HVAC&R systems, circuits, equipment, and controls; knowledge of national electrical codes.

f. Skills and Abilities

Ability to plan, layout and complete the installation, modification and repair of various systems, circuits, equipment, and controls; ability to interpret and apply building plans, blueprints, wiring diagrams, and engineering drawings, skill in the use of a wide variety of testing equipment.

Must be able to use all tools of the air conditioning and refrigeration field; must have local driver's license.

16. Position Element

a. Supervision Received

Receives assignments verbally and by work order. Independently determines work methods to accomplish assignments. Completed work is periodically inspected for acceptability and compliance with accepted trade standards. Immediate supervisory position is:HVAC&R Engineer (Mechanical) position, FSN-1105-10.

b. Supervision Exercised

May direct the work of one or more Trade Helpers.

c. Available Guidelines

Guidelines are provided by established trade practices in the trade, by agency technical manuals, manufacturer's instructions and catalogs.

d. Exercise of Judgment

Determines work methods and plans working details to accomplish assignment, e.g., plans and lays out the needed routing, and arrangement of system's circuits, controls and equipment.

e. Authority to Make Commitments

None.

f. Nature, Level, and Purpose of Contacts

Majority of personal contacts is with colleagues and other maintenance personnel. Explains proper operation and maintenance of equipment and appliances to users.

g. Time Expected to Reach Full Performance Level

Approximately one year before assignments to all possible work stations.